REMARKS

The Office Action dated April 18, 2007 has been received and carefully noted. The following remarks are submitted as a full and complete response thereto. Claims 1-13 and 24-29 are submitted for reconsideration.

The Office Action indicated that claim 4 would be allowable if rewritten in independent form. Based on the arguments presented below, Applicants submit that claim 4 and all of the pending claims are allowable in the present form. Thus, Applicants requests that all of the pending claims be allowed.

Claims 1, 25, 27 and 29 were rejected under 35 U.S.C. 103(a) as being anticipated by U.S. Patent No. 6,711,143 to Balazinski (hereinafter Balazinski) in view of U.S. Patent No. 6,735,634 to Geagan (hereinafter Geagan). According to the Office Action, Balazinski discloses all of the elements of claims 1, 25, 27 and 29 except for disclosing encapsulating a data packet with a User Datagram Protocol (UDP) and an Internet Protocol (IP). Therefore, the Office Action combined the teaching of Balazinski and Geagan to yield all of the elements of claims 1, 25, 27 and 29. The rejection is traversed as being based on a references that neither teach nor suggest the novel combination of features clearly recited in independent claims 1, 25, 27 and 29.

Claim 1, upon which claims 2-13 and 24 depend, recites a method of communicating data between a base station system a serving GPRS support node. The method includes providing protocol data and associated functions, including encapsulating a data packet with a user datagram protocol and a Internet Protocol. The

user datagram protocol includes a user datagram protocol port associated with a network service virtual connection (NS-VC) and, the Internet Protocol provides an Internet Protocol address associated with a network service entity (NSE). The method also includes transmitting the data packet provided with the protocol data.

Claim 25, upon which claim 26 depends, recites a base station system for communicating data with a serving GPRS support node. The base station system includes means for providing protocol data and associated functions, including encapsulating a data packet with a user datagram protocol and a Internet Protocol. The user datagram protocol includes a user datagram protocol port associated with a network service virtual connection (NS-VC) and, the Internet Protocol provides an Internet Protocol address associated with a network service entity (NSE). The base station system also includes means for transmitting the data packet provided with the protocol data.

Claim 27, upon which claim 28 depends, recites serving GPRS support Node for communicating data with a base station system. The serving GPRS support Node includes means for providing protocol data and associated functions, including encapsulating a data packet with a user datagram protocol and a Internet Protocol. The user datagram protocol includes a user datagram protocol port associated with a network service virtual connection (NS-VC) and, the Internet Protocol provides an Internet Protocol address associated with a network service entity (NSE). The serving GPRS support Node also includes means for transmitting the data packet provided with the protocol data.

Claim 29 recites an apparatus including providing means for providing protocol data and associated functions, including encapsulating a data packet with a user datagram protocol and a Internet Protocol. The user datagram protocol comprises a user datagram protocol port associated with a network service virtual connection and, the Internet Protocol provides an Internet Protocol address associated with a network service entity. The apparatus also includes transmitting means for transmitting the data packet provided with the protocol data. The apparatus communicate data between a base station system and a serving GPRS support node.

As outlined below, Applicant submits that the cited references of Balazinski and Geagan do not teach or suggest the elements of claims 1, 25, 27 and 29.

Balazinski teaches a method of converting a Gb interface to IP while continuing to support Frame Relay and without adversely affecting the interface's performance. Col. 3, lines 19-21. Instead of encapsulating Frame Relay information in IP packets, Balazinski modifies the lower NS sub-layer. Col. 3, lines 21-24. Balazinski includes a Base Station System (BSS) and a Serving GPRS Support Node (SGSN) both of which use a protocol stack including a physical layer, a network service (NS) layer including a NS-Sub-Network Service (NS-NSS) layer and a NS-Sub-Network Control (NS-NSC) layer, and Base Station System GPRS Protocol (BSSGP) layer. Col. 3, lines 27-40. The primary function of the BSSGP layer is to provide radio-related QoS, and routing information that is required to transmit user data between a BSS and an SGSN. Col. 3, lines 41-45. On the BSSGP layer, there are a Point-to-Point (PTP) functional entity, a Point-to-Multipoint

(PTM) functional entity and a signaling (SIG) functional entity. Col. 3, lines 64-67. The existing NS layer adapts the BSS to the Frame Relay protocol and the main function of the NS layer is to provide transportation for BSSGP Virtual Circuits (BVC) over a Frame Relay network. Col. 4, lines 15-18. The primary functions of the existing NS-NSC sub-layer are transmission of NS Service Data Units (SDU), load sharing between different NS virtual circuits and NS virtual circuit management. The primary functions of the existing NS-SNS layer are providing access to the Frame Relay network or the NSE peer identity by means of a Network Service-Virtual Link (NS-VL), providing NS virtual circuits between peer NSEs, transferring NS SDUs in sequence order on each NS virtual circuit unless order is not require and indicating to the upper layer the availability/unavailability of an NS virtual circuit. Col. 4, lines 42-67. The protocol stack includes a physical layer, a link layer, an Internet Protocol (IP) Layer, a User Datagram Protocol (UDP) layer, a modified NS layer that is divided into an NS-SNS layer and an NS-NDC layer and the BSSGP layer which is unchanged from the existing protocol stack. Col. 5, lines 1-6.

Balazinski transports information from the SGSN functional entities to the BSS functional entities and instead of using Frame Relay virtual circuits, uses IP packets following multiple routes between end points over a connectionless IP network. The modified Gb interface uses a UDP layer over an IP layer. One UDP port is reserved in order to make the modified NS layer and the BSSGP layer act as an application over the IP stack. Col. 5, lines 14-48.

Geagan discloses that RTP usually carries data in the form of packets, using the user datagram protocol (UDP) as the delivery mechanism. UDP provides a "wrapper" around data packets, with the wrapper providing for multiplexing and demultiplexing as well as error checking services. Essentially, a UDP packet is made up of a UDP header and UDP data encapsulated as the data portion of an IP packet. The IP packet itself includes an IP header (which includes the address information discussed above) as well as the user data (i.e. the multimedia content of interest) as a payload. See at least Col. 2. lines 40-50 of Geagan.

Applicants submit that the combination of Balazinski and Geagan does not teach or suggest each of the elements recited in claims 1, 25, 27 and 29. According to the Office Action, Geagan teaches encapsulating a data packet with a User Datagram Protocol (UDP) and an Internet Protocol (IP), wherein the UDP includes a UDP port associated with a Network Service Virtual Connection (NS-VC) and, the IP provides an IP address associated with a Network Service Entity (NSE), as recited in claims 1, 25, 27 and 29. The Office Action cites Col. 2, lines 41-50 of Geagan as teaching encapsulating a data packet with a UDP and IP. The cited section of Geagan does disclose that the UDP packet includes a UDP header and UDP data encapsulated as the data portion of an IP packet, wherein the IP packet includes an IP header and the user data as a payload. However, Geagan does not teach or suggest encapsulating a data packet with a User Datagram Protocol (UDP) and an Internet Protocol (IP), **wherein the UDP includes a UDP port associated with a Network Service Virtual Connection (NS-VC) and, the**

IP provides an IP address associated with a Network Service Entity (NSE), as recited in claims 1, 25, 27 and 29.

The Office Action also alleged that based on figure 2 and Col. 5, lines 35-37 of Balazinski, the NSE can be associated with UDP ports and IP address. The cited sections of Balazinski teach away from implementing the IP-based Gb' interface using UDP ports as BVCIs and NSEI as IP addresses. The cited sections of Balazinski discloses the use of a single UDP port rather than using the UDP ports as BVCIs and the NSEIs as IP addresses because that approach would cause many complications from the O& M perspective. Thus, if one skilled in the art were to combine the teachings of Geagan and Balazinski, the combination would not yield encapsulating a data packet with a User Datagram Protocol (UDP) and an Internet Protocol (IP), **wherein the UDP includes a UDP port associated with a Network Service Virtual Connection (NS-VC) and, the IP provides an IP address associated with a Network Service Entity (NSE)**, as recited in claims 1, 25, 27 and 29. Therefore, Applicants submit that Balazinski and Geagan do not teach or suggest encapsulating a data packet with a UDP and IP, wherein the UDP comprises a UDP port associated with a Network Service-Virtual Connection and the IP provides an IP address associated with a Network Service Entity as recited in claims 1, 25, 27 and 29. Based on the arguments presented above, Applicants respectfully assert that the rejection under 35 U.S.C. §103(a) should be withdrawn because neither Balazinski nor Geagan whether taken singly or combined teaches or suggests each feature of claims 1, 25, 27 and 29.

Claims 2 and 5-13 were rejected under 35 U.S.C. 103(a) as being unpatentable over Balazinski in view of Geagan and further in view of the Admitted Prior Art (APA) of WO 99/16266 to Forslow (hereinafter Forslow). According to the Office Action, Balazinski and Geagan disclose all of the elements of claims 2 and 5-13 except for disclosing that the UDP port is identified as either for real-time or non-real time services. Therefore, the Office Action combined Balazinski, Geagan and Forslow to yield all of the elements of claims 2 and 5-13. The rejection is traversed as being based on references that neither teach nor suggest the novel combination of features clearly recited in independent claim 1, upon which claims 2 and 5-13 depend.

Claim 1, Geagan and Balazinski have been discussed above. Forslow teaches that a mobile station and a mobile network gateway node each includes a mapper for mapping an individual application flow to one of the circuit-switched network and a packet-switched network bearer depending on the quality of service requested for the individual application flow.

Claims 2 and 5-13 depend on claim 1, and thus, incorporate all of the elements of claim 1. Forslow does not cure the deficiencies of Balazinski. There is no teaching or suggestion in Forslow of encapsulating a data packet with a User Datagram Protocol (UDP) and an Internet Protocol (IP), wherein the UDP includes a UDP port associated with a Network Service Virtual Connection (NS-VC) and, the IP provides an IP address associated with a Network Service Entity (NSE), as recited in claim 1. Therefore, Therefore, Applicants respectfully assert that the rejection under 35 U.S.C. §103(a)

should be withdrawn because neither Balazinski, Geagan nor Forslow, whether taken singly or combined, teaches or suggests each feature of claim 1 and hence, dependent claims 2 and 5-13 thereon.

Claim 3 was rejected under 35 U.S.C. 103(a) as being unpatentable over Balazinski in view of Geagan and further in view of U.S Patent No. 6,636,502 to Lager (hereinafter Lager). According to the Office Action, Balazinski and Geagan disclose all of the elements of claim 3 except for disclosing that the data packet is associated with a temporary logical link identifier and a network services access point identifier. Therefore, the Office Action combined Balazinski, Geagan and Lager to yield all of the elements of claim 3. The rejection is traversed as being based on references that neither teach nor suggest the novel combination of features clearly recited in independent claim 1, upon which claim 3 depends.

Lager teaches a switching device which allows a connection of a terminal of a mobile communications network with one of a plurality of packet data communication network based on a transmission of an indication parameter from the terminal. See at least the Abstract of Lager.

Claim 3 also depends on claim 1 and thus incorporates all of the elements of claim 1. Lager does not cure the deficiencies of Balazinski. Specifically, there is no teaching or suggestion in Lager of encapsulating a data packet with a User Datagram Protocol (UDP) and an Internet Protocol (IP), wherein the UDP includes a UDP port associated with a Network Service Virtual Connection (NS-VC) and, the IP provides an

IP address associated with a Network Service Entity (NSE), as recited in claim 1. Therefore, Applicants respectfully assert that the rejection under 35 U.S.C. §103(a) should be withdrawn because neither Balazinski nor Lager, whether taken singly or combined, teaches or suggests each feature of claim 1 and hence, dependent claim 3.

Claims 24, 26 and 28 were rejected under 35 U.S.C. 103(a) as being unpatentable over Balazinski in view of Geagan and further in view of U.S Patent No. 6,952,728 to Alles (hereinafter Alles). According to the Office Action, Balazinski and Geagan disclose all of the elements of claims 24, 26 and 28, except for disclosing that the UDP includes source and destination UDP ports associated with the NS-VC and the IP provides a source or destination IP address associated with the NSE. Therefore, the Office Action combined Balazinski, Geagan and Alles to yield all of the elements of claims 24, 26 and 28. The rejection is traversed as being based on references that neither teach nor suggest the novel combination of features clearly recited in independent claims 1, 25 and 27, upon which claims 24, 26 and 28 depend.

Alles teaches an Internet service node that enables the provision of desired service policies to each subscriber. The node may include multiple processor groups, with each subscriber being assigned to a processor group. The assigned processor group may be configured with the processing rules, which provide the service policies desired, by the subscriber. See at least the Abstract of Alles.

Claim 24 also depends on claim 1, and thus, incorporates all of the elements of claim 1. Claim 26 depends on claim 25, and thus, incorporates all of the elements of

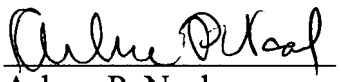
claim 25; claim 28 depends on claim 27, and thus, incorporates all of the elements of claim 27. Alles does not cure the deficiencies of Balazinski. Specifically, Alles does not teach or suggest encapsulating a data packet with a User Datagram Protocol (UDP) and an Internet Protocol (IP), wherein the UDP includes a UDP port associated with a Network Service Virtual Connection (NS-VC) and, the IP provides an IP address associated with a Network Service Entity (NSE), as recited in claims 1, 25 and 27. Therefore, Applicant requests that the rejection under 35 U.S.C. §103(a) be withdrawn because neither Balazinski nor Alles, whether taken singly or combined, teaches or suggests each feature of claims 1, 25 and 27 and hence, dependent claim 24, 26 and 28 thereon.

As noted previously, claims 1-13 and 24-29 recite subject matter which is neither disclosed nor suggested in the prior art references cited in the Office Action. It is therefore respectfully requested that all of claims 1-13 and 24-29 be allowed and this application passed to issue.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, the applicants' undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, the applicants respectfully petition for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,



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